



**KTH Architecture and
the Built Environment**

CALL FOR APPLICATIONS

Decision Theory & Decision Analysis (AG3006)

PhD Course

January-June 2020 (7.5 ECTS)

Division of Urban and Regional Studies
School of Architecture and the Built Environment
KTH Royal Institute of Technology

Course responsible teacher: Professor Jonathan Metzger
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General description

This course provides an introduction to decision analysis as it is currently practiced within the critical social sciences. Students in the course will gain a nuanced understanding of established approaches to the analysis of decision making, as well as recent developments in the field. The course introduces a number of key themes in decision theory and also provides opportunities for students to relate this knowledge to their own areas of interest and a basic ability to apply the discussed theories in an analysis of their own research materials.

The course primarily focuses on the application of descriptive analysis of decision making in planning and policy processes within variegated organizational, political and cultural contexts. However, it also more briefly introduces the students to classical normative decision theories, as well as analyses of decision making from the

perspective of the individual. Some of the key themes in the course relate to decision making rationality, rules of decision making, power in decision making, negotiations, complexity and ambiguity, ethics of decision making and decision analysis, tools for decision making and decision engineering. A carrying theme in the course is also sustainability aspects of decision making, which will feature recurrently in the course activities. Throughout the course, these themes function as bases for developing applied analyses of concrete cases of decision making.

Course objectives & learning outcomes

The course will provide participants with a broad and multi-dimensional understanding of decision making processes based upon established and emerging key approaches within the social sciences. Participants will further gain the ability to practically apply these perspectives to the analysis of concrete episodes of decision making. After completing the course participants will also be able to discuss and problematize decision making situations from the perspective of their ethical and sustainability aspects.

After successfully completing the course, participants will be able to:

- Critically discuss and comparatively assess the contextual relevance of classical and contemporary social scientific theories of decision making
- Apply the presented theories of decision making in the analysis of real-life cases of decision making within planning and policy processes
- Analyze how diverse formal and informal contexts influence how decision making processes unfold
- Problematize how ambiguities, complexities and power relations affect decision making processes and their outcomes
- Demonstrate and discuss ethical challenges and dilemmas associated with decision making processes
- Analyze decision making processes from the perspective of sustainability

Course design

The course is primarily based upon the participants' **individual essay** in which the theoretical perspectives presented in the course literature are applied in a thorough analysis of a decision making process of their choice ('case'). Regular seminar **assignments** will function as a support in the development of these analyses, as well as

recurrent **seminars** in which the case analyses-in-progress will be presented and discussed. **Lectures** and **workshops** provide broadened perspectives on the course themes. The finalized case analyses will then be presented for feedback from the course teacher and fellow participants in a **final seminar**.

Preliminary dates for course activities (full days) are 28-29/1, 3-4/3, 31/3-1/4, 21-22/4, 12-13/5, 2-3/6. All course activities will take place at the KTH main campus in Stockholm.

Literature

Bijker, W.E., Bal, R. & Hendriks, R. (2009). *The paradox of scientific authority: the role of scientific advice in democracies*. Cambridge, Mass.: MIT Press.

Brunsson, N. (2007) *The consequences of decision-making*. Oxford: Oxford University Press.

Hansson, S. O. (2005) *Decision Theory: A brief introduction*. Stockholm: KTH Royal Institute of Technology, <https://people.kth.se/~soh/decisiontheory.pdf>

Kahneman, D. (2011). *Thinking, fast and slow*. New York: Farrar, Straus and Giroux

March, J.G. (2009 [1994]) *A primer on decision making: how decisions happen*. New York: Free Press.

March, J.G. (1988). *Decisions and organizations*. New York, N.Y.: Blackwell.

Metzger, J. & Lindblad, J (in press). *Introduction*. In J Metzger & J Lindblad (eds.) *Dilemmas of sustainable urban development: a view from practice*. New York: Routledge.

Examination

The examination will be based on 1) active seminar participation; 2) completion of seminar assignments; 3) completion of individual assignment. The course is graded Pass/Fail. Any absence from mandatory course activities or failure to deliver assignments according to deadline will demand compensatory work.

How to apply

Application by e-mail to jonathan.metzger@abe.kth.se . Please send your application as soon as possible and no later than the 1st of December. Applications from doctoral students at all universities and higher education institutes are welcomed – but please be aware that the number of course participants is limited, and that enrolment into the course cannot be guaranteed. Course fees will not be charged.